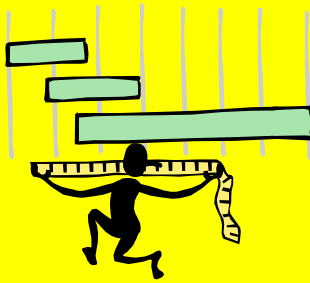


Metric Mania



Metric Conversions Ladder Method

Ladder Method

1

2

3

KILO
1000
Units

HECTO
100
Units

DEKA
10
Units

Basic Unit
↑
Meters
Liters
Grams

DECI
0.1
Unit

CENTI
0.01
Unit

MILLI
0.001
Unit

To convert to a smaller unit, move decimal point to the right or multiply.

→

To convert to a larger unit, move decimal point to the left or divide.

←

How do you use the “ladder” method?

1st – Determine your starting point.

2nd – Count the “jumps” to your ending point.

3rd – Move the decimal the same number of jumps in the same direction.

4 km = _____ m

↑ ↑

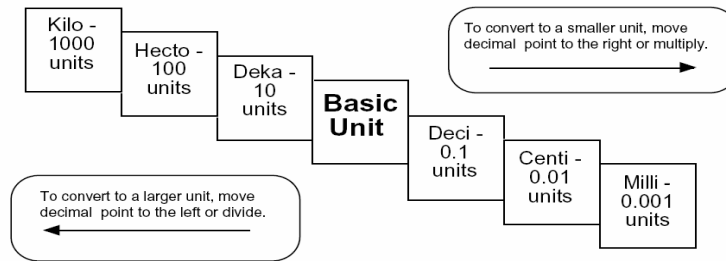
Starting Point Ending Point

How many jumps does it take?

4. = 4000 m

1 2 3

Conversion Practice



Try these conversions using the ladder method.

$$1000 \text{ mg} = \underline{\hspace{2cm}} \text{ g} \qquad 1 \text{ L} = \underline{\hspace{2cm}} \text{ mL} \qquad 160 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$$

$$14 \text{ km} = \underline{\hspace{2cm}} \text{ m} \qquad 109 \text{ g} = \underline{\hspace{2cm}} \text{ kg} \qquad 250 \text{ m} = \underline{\hspace{2cm}} \text{ km}$$

Compare using $<$, $>$, or $=$.

$$56 \text{ cm} \bigcirc 6 \text{ m}$$

$$7 \text{ g} \bigcirc 698 \text{ mg}$$

Metric Conversion Challenge

Write the correct abbreviation for each metric unit.

- | | | |
|-------------------|---------------------|---------------------|
| 1) Kilogram _____ | 4) Milliliter _____ | 7) Kilometer _____ |
| 2) Meter _____ | 5) Millimeter _____ | 8) Centimeter _____ |
| 3) Gram _____ | 6) Liter _____ | 9) Milligram _____ |

Try these conversions, using the ladder method.

- | | | |
|-----------------------|----------------------|-----------------------|
| 10) 2000 mg = _____ g | 15) 5 L = _____ mL | 20) 16 cm = _____ mm |
| 11) 104 km = _____ m | 16) 198 g = _____ kg | 21) 2500 m = _____ km |
| 12) 480 cm = _____ m | 17) 75 mL = _____ L | 22) 65 g = _____ mg |
| 13) 5.6 kg = _____ g | 18) 50 cm = _____ m | 23) 6.3 cm = _____ mm |
| 14) 8 mm = _____ cm | 19) 5.6 m = _____ cm | 24) 120 mg = _____ g |

Compare using <, >, or =.

25) 63 cm ○ 6 m

27) 5 g ○ 508 mg

29) 1,500 mL ○ 1.5 L

26) 536 cm ○ 53.6 dm

28) 43 mg ○ 5 g

30) 3.6 m ○ 36 cm